Logistics and Planning: Walmart's Competitive Advantage

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Walmart has been the largest company in the world since 2014, earning over \$572 billion in revenue in 2022 (Wikipedia contributors, 2023, February 4). It is also the world's largest private employer, with over 2.3 million employees (How many people work at walmart?, 2022). From its first store, opened in 1962, it maintained cumulative average growth rates of 8 percent over the next five and a half decades to become the largest private company in the world (Phillips, L. & Rozworski, M., 2019, p. 30). Walmart achieved this amazing growth in part by incorporating new developments in information processing power and applying them in its business planning and logistics, achieving efficiencies and cutting costs.

In 1975 Walmart leased an IBM 370/135 and became one of the first retailers to link its store and warehouse inventories (Phillips, L. & Rozworski, M., 2019, p. 32). In 1983 the company began to use barcode scanning for managing point of sales data (Wailgum, 2007). A year later store employees began using handheld Texlon terminals for merchandise reordering, enabling them to obtain information and place orders while standing at an item's shelf. In 1987 it completed the largest private satellite communication system in the United States at the time, linking all of the company's operating units with two-way voice, data and one-way video communication. (Wailgum, T., 2007).

In 1988, Walmart partnered with Procter & Gamble to implement the latter's new continuous replenishment stocking technique (p. 33). Continuous replenishment is an automatic inventory system with which a retailer uses a warehouse management program

to share stock information with a supplier, leading to both reduced costs and better customer service (Indeed Editorial Team, 2022). In 1990 it developed a data warehouse prototype to store historical sales data. Two years later it deployed the Retail Link system, providing vendors information on sale trends and inventory levels, and in 1996 it made Retail Link available through the Internet (Wailgum, T., 2007).

Walmart continues to invest heavily in supply chain optimization. Between 2019 and 2020 the company spent seventy-two percent of its \$11 billion strategic capital expenditure budget on supply chain technologies, infrastructure, and ecommerce (Flora, M., 2022).

It seems abundantly clear that Walmart's deep commitment to using technology in support of its logistics and planning has much to do with its tremendous success as a capitalist enterprise. As ShipBob's Meredith Flora says in her post, *Walmart Supply Chain: What Makes It (Still) So Successful*, "Walmart's supply chain success can be attributed to their tactful decisions to start investing in the right initiatives, including technology and expanding their logistics network" (2022).

What is more interesting, particularly for those seeking new just and sustainable business rules in the face of the ever growing wealth and income inequality, and environmental degradation generated under the current ones, is the implications that Walmart's business practices might have for the economic future. In their book, *People's Republic of Walmart: How the World's Biggest Corporations are Laying the Foundation for Socialism*, author's Leigh Phillips and Michal Rozworski argue that Walmart's success provides a practical example of the effectiveness of economic planning on a massive scale, and thus reopens the socialist calculation debate from the early 20th century,

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popularly assumed to have been decided by markets victory over planning at the end of the Cold War (2019, p. 22).

Their argument, in brief, is that what is perhaps the strongest theoretical argument ever mounted against socialism, by Austrian School economist Ludwig von Mises in his 1920 essay, *Economic Calculation in the Socialist Commonwealth* (2008), stating that socialist planning is not theoretically possible, since no human process could possibly gather all the necessary data, assess it in real time, and produce plans that accurately describe supply and demand across all sectors, is essentially disproven in practice by the success of Walmart (Phillips, L. & Rozworski, M., 2019, pp 27-29).

As they state in the section of the second chapter titled, "*Planning in Practice*, "Walmart is perhaps the best evidence we have that while planning appears not to work in Mises's theory, it certainly does in practice. And then some." (p. nn). They point out that if Walmart were a country, it would have the 38th largest economy in the world, roughly the size of Sweden or Switzerland (p. 30).

Walmart uses its logistics and management investments to engage in long term planning with its suppliers. "[The] company sets in place long-term, high-volume strategic partnerships with most suppliers. The resulting data transparency and cross–supply chain planning decrease expenditures on merchandising, inventory, logistics, and transportation for all participants in the supply chain, not just for Walmart (p. 37). After saying that while Walmart was pivotal in the development of supply chain management, the practice has now been adopted across the industry. Still, the authors say that Walmart may still be the company most dedicated to the practice.

"In 1995, Walmart further ramped up its cooperative supply chain approach under the moniker Collaborative Planning, Forecasting and Replenishment (CPFR), in 4

which all nodes in the chain collaboratively synchronize their forecasts and activities" (p. 38).

The success of Walmart as a massive, planned economy, Phillips and Rozworski provocatively argue, compels us to revisit the socialist calculation debate and consider it anew in light of the information processing power made possible by the information age.

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